

## For more information

*To contact the ARB regarding major heavy-duty programs, call:*

*(916) 322-7061 (from Northern CA)*

*(626) 450-6161 (from Southern CA)*

*To contact the ARB toll-free:*

*(800) END-SMOG (CA only) or*

*(800) 242-4450 (outside CA)*

*P.O. Box 2815*

*Sacramento, CA 95812*

*For information in Alternative formats:*

*(916) 323-4916 (voice, ARB ADA Coordinator)*

*(916) 324-9531 (TDD, Sacramento area only)*

*(800) 700-8326 (TDD, outside of Sacramento)*

*(Rev. 4-05)*



State of California  
Arnold Schwarzenegger, Governor

California Environmental Protection Agency  
Linda S. Adams  
Secretary for Environmental Protection

Air Resources Board  
Robert F. Sawyer, Ph.D., Chairperson



California Air Resources Board  
Heavy-Duty Diesel Enforcement Program  
P.O. 2815  
Sacramento, California 95812  
(916) 322-7061 (from Northern California)  
(626) 450-6161 (from Southern California)  
1-800-END-SMOG

California Environmental Protection Agency



**Air Resources Board**

**facts about...**

**major heavy-duty diesel programs**

Helping you do  
your part to help  
clean the air



**HD vehicle information series**

**5**

**[www.arb.ca.gov](http://www.arb.ca.gov)**

Tel: (916) 322-7061 (from Northern California)  
(626) 450-6161 (from Southern California)  
1-800-END-SMOG

# Major Heavy-Duty Diesel Programs

ARB is responsible for developing state-wide programs to reduce emissions of smog-forming pollutants and toxics by mobile sources.

## **Air Toxic Control Measure (ATCM)**

To decide what toxic air pollutants are the most important, the ARB has a comprehensive process to prioritize the identification of substances and to develop control measures. We conduct research and use the most up-to-date scientific information on the chemicals used in California's industry and commerce. Based upon review of exposure and health effects information, we identify the priority toxic air pollutants that pose the greatest health threat. While there are thousands of chemicals emitted into the air, our ongoing review ensures our resources are focused on control actions that most benefit public health.

### **ATCM No. 1: School Bus Idling ATCM**

This ATCM requires a driver of a school bus or delivery vehicle, or other commercial motor vehicle to manually turn off the engine upon arriving at, or within 100 feet of, a school and to restart no more than 30 seconds before departing. A driver of a school bus or delivery vehicle is prohibited from idling more than five minutes at each stop beyond schools, such as parking or maintenance facilities, school bus stops or school activity destinations. A driver of a transit bus or other commercial motor vehicle is prohibited from idling more than five minutes at each stop within 100 feet or a school. Idling when it is necessary for health, safety, or operational concerns is exempt from these restrictions.

### **ATCM No. 2: Transport Refrigeration Units (TRUs) ATCM**

This regulation applies to owners/operators of diesel-fueled TRUs and TRU gen sets that operate in the State of California. This specifically includes operators/owners of TRUs and TRU gen sets that are installed on trucks, trailers, shipping containers, or railcars. Only military tactical support equipment is exempt from this regulation.

### **ATCM No. 3: Commercial Vehicle Idling ATCM**

This regulation applies to both California and non-California diesel-fueled commercial vehicles that weigh >10,000 lbs that operate in the State of California. Idling is limited to 5 minutes within California and limits the use of diesel auxiliary power systems and main engines to 5 minutes when within 100 feet of homes or schools while driver is resting.

## **Heavy-Duty Vehicle Inspection Program (HDVIP)**

ARB staff inspects trucks and buses for excessive smoke. Trucks and buses with excessive smoke are subject to fines starting at \$300.00. Under the Periodic Smoke Inspection Program, trucking fleet operators are required to self-inspect their trucks and repair those with excessive smoke.

## **Mexican/American Border Activities**

The Cal/EPA, in conjunction with ARB and the Bureau of Automotive Repair, established a partnership with the City of Tijuana to develop pilot programs for light-duty and heavy-duty vehicle emissions testing. These programs, modeled after California's HDVIP and smog check programs, will set the stage to minimize vehicular emissions in border cities. With the forthcoming implementation of the North American Free Trade Agreement (NAFTA), it is crucial to ensure that the vehicles traveling back and forth across the border do not adversely impact air quality in either California or Mexico. The ARB maintains full-time HDVIP inspection sites at both Otay Mesa and Calexico. Under the provisions of Assembly Bill 1009 (enacted in 2004), the ARB is developing new regulations to further reduce emissions from trucks crossing the border into California.

## **Periodic Smoke Inspection Program (PSIP)**

Under the PSIP, trucking fleet operators are required to self-inspect their trucks and repair those with excessive smoke. Vehicle smoke emissions must be below 40% opacity for 1991 and newer engines and below 55% opacity for engines older than 1991. Fleet owners are not required to inspect vehicles that are powered by engines in their first four model years (example: in 2005 all 2001-2005 engines would be exempt). Heavy-duty diesel powered vehicles that are not part of a fleet are exempt.

## **Red-Dyed Diesel Fuel Enforcement**

Diesel fuel, which is used to power a vehicle on the California roadways, is subject to motor vehicular fuels tax; diesel fuel used for off-road or stationary equipment is not subject to motor vehicular fuels tax. Non-taxed diesel is required to be dyed red so trained inspectors may easily recognize it. In the 1990s, IRS estimated that the national revenue lost from the illegal use of non-taxed diesel exceeded one billion dollars annually. The IRS contracted with the ARB to sample red-dyed diesel by conducting field inspections for red-dye diesel fuel, red-dye analysis, and diesel fuel investigations.

## **Re-Flash Program—Software Upgrade for Diesel Trucks**

New regulations will reduce air pollution by requiring owners and operators of trucks, school buses, and motor homes with 1993-1998 model year heavy-duty diesel engines to upgrade the software in the electronic control module (ECM) of these engines. Software upgrades were developed by the engine manufacturers and are available now for most 1993-1998 model year engines used in 1993-1999 model year vehicles. This software upgrade will significantly reduce the excess pollution from 1993-1999 trucks and buses by reducing smog-forming pollutants.

## **Smoking Vehicle Complaint Program**

The dirtiest vehicles found on our roadways contribute about 40% of total automotive pollution. A well maintained vehicle is a cleaner running, lower emitting vehicle. If you notice a smoking vehicle on the roadway, you can help our effort by reporting it to: 1-800-END-SMOG.

## **California Council on Diesel Education and Technology (CCDET)**

It is important that individuals or firms that perform smoke opacity testing related to the ARB's HDVIP and PSIP, have a clear understanding of the program regulations and be able to correctly administer the SAE J1667 opacity test. To this end, the CCDET was established as a partnership between the ARB, the diesel trucking industry, and the California Community Colleges. There are currently six colleges within California (College of Alameda, San Joaquin Delta College, Santa Ana College, Los Angeles Trade Tech., Palomar College, and San Diego Miramar College) that offer low-cost training in the proper application of SAE J1667, as well as some smoke-related engine repairs and maintenance practices.

## **Solid Waste Collection Vehicles (SWCV's)**

The SWCV rule applies to owners of SWCV's over 14,000 gross vehicle weight (GVW), with engines from years 1960 to 2006. Vehicles must meet best available control technology (BACT) by 2007 to 2010 through retrofits or engine upgrades. BACT is an ARB-verified technology that best reduces PM emissions from diesel engines. The expected reduction in toxic PM emissions is 81% by 2010 and 85% by 2015 from levels that existed in 2000.